Roadway Safety and Wildlife Collisions

Introduction

Within the scope of the Northeast Region's Long-Range Transportation Plan a vehicular crash study has been undertaken at Shenandoah National Park. The intent of the study has been to characterize the type and number of motor vehicle accidents which have occurred in the recent past within Shenandoah National Park and to develop recommendations for improving roadway safety.

This project has a direct relationship with resource management within the park because many vehicular accidents involve park wildlife.

Bear Fatality

Management Needs

Using Servicewide Traffic Accident Reporting System (STARS) data from 1990 to 2005, a relatively large number of wildlife collisions (507) were documented. This represents the largest number for any single crach type and is more than twice as many as the next most frequent crash type.

While a few parks have more wildlife collisions than Shenandoah, this number far exceeds many parks.

Most of these collisions involve property damage but 30 involved personal injury. No information was available on the fate of the animals in these collisions. Staff experience indicates that many animals were killed or injured.

The majority of these collisions involve white-tailed deer although some involve black bears and a very small number may involve a variety of small mammals.

Current Procedures

As of May, 2010, most data analysis has been completed. Park staff has provided commentary on that data which should be included in the Crash Study Report and which should add depth and greater understanding to the analyses that have been completed.

It is important to note that this study was focused on human fatalities and injuries, and property damage. No attempt was made to assess impacts to park wildlife presumably, however, most of these accidents involved large mammals; primarily deer and followed by black bears. Furthermore, though not within the scope of this study, it is common knowledge that many small mammals, reptiles, amphibians, and birds are struck and killed or injured by vehicles in the park.

Park staff has also provided feedback on steps that could be taken to help reduce the number of collisions. Ideas that are being considered include development of a messaging program within current park literature, through the use of portable signs along Skyline Drive in lieu of fixed signs, and the use of portable electronic messaging boards which would emphasize changing visitor behaviors such as speeding. Similar programs have been implemented at Grand Teton National Park, Yosemite National Park, and Jasper National Park in Canada. Jurisdictions like British Columbia and Alaska, which have high rates of wildlife collisions involving large mammals like elk and moose have also instituted similar programs.

Once these ideas are formalized and endorsed by the park, resource management staff will begin seeking funding to achieve implementation.

Yosemite's "Red Bear-Dead Bear" Sign